

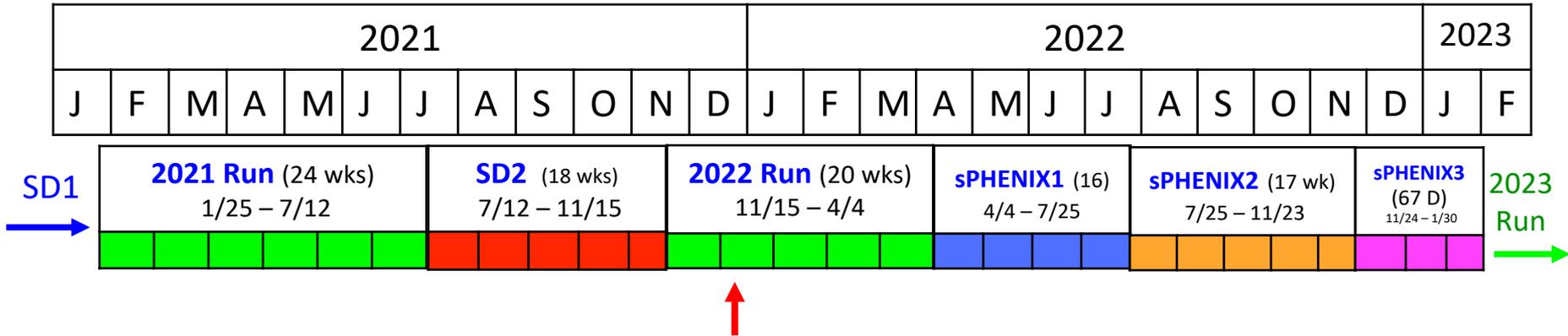
Run 22 RHIC Machine/Experiments Meeting

December 21, 2021

Agenda:

- Welcome and Overall schedule for the FY 22 RHIC run
 - STAR status, schedule, and update
 - CeC status, schedule, and update
 - RHIC status, schedule, and update
 - Some comments on Polarimetry
 - All Other Business (AOB)
- W. Christie
 - J.H. Lee
 - V. Litvinenko
 - V. Schoefer
 - E. Aschenauer

Rough Look at Long Term Schedule



N.B. We are five weeks and 1 day past the November 15th date start of RHIC run 2022 start date.

N.B. This Schedule was the result of meetings that were held in late summer of 2020 to discuss the longer-term schedule.

A calendar for the remainder of Calendar 2021

| November | | | | | | |
|--------------------|----|----|----|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | | | | |
| 4:● 11:◐ 19:○ 27:◑ | | | | | | |

| December | | | | | | |
|--------------------|----|----|----|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
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| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |
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Today's date



Scheduled start of Helium cooldown. With schedule issue that arose three weeks ago, the cooldown started for only the Blue ring.



Yellow ring cooldown started.



First collisions for STAR.

Discussion topic: Key questions are the polarization that can be achieved for the Blue beam, any tilts to the polarization at STAR, and whether the Blue partial snake magnet will remain operational.

All Other Business (AOB)

- AOB

Program Advisory Committee (PAC) recommendations on the 2022 RHIC Run

2.2 Discussion and Recommendations for RHIC Run 22

The Run 22 BUR of a transversely polarized pp run at 510 GeV with the STAR Forward Upgrade represents a unique opportunity to address important issues in spin physics and will allow exploration of the regimes of low and high- x physics with unprecedented precision. New results anticipated for Run 22 with the Forward Upgrade can have important impacts on the planning for EIC, as well as on the interpretation of EIC data. *The PAC strongly endorses the STAR Run 22 BUR.*

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If Run 22 were to be reduced from 20 to 18 weeks that would result in at least a 15% reduction of the integrated luminosity and have a very detrimental effect on the prospects of achieving all the physics goals. Given that the CeC beam time would additionally reduce the STAR run by 2.6 weeks, this would have further negative effects on the physics programme. C-AD is strongly encouraged to optimize RHIC operations to fulfill the goals of both CeC and STAR.

What is shown here are the first and eighth paragraphs from the PAC report concerning the 2022 RHIC run. The other paragraphs of the section deal with physics, as opposed to operations topics.